

To: egarvey@pirnie.com;egarland@hydroqual.com[]; garland@hydroqual.com[]
Cc: sthompson@pirnie.com;smcdonald@pirnie.com;BFidler@PIRNIE.COM;Elizabeth.A.Buckrucker@usace.army.mil;jfitzpatrick [jfitzpatrick@hydroqual.com]; mcdonald@pirnie.com;BFidler@PIRNIE.COM;Elizabeth.A.Buckrucker@usace.army.mil;jfitzpatrick [jfitzpatrick@hydroqual.com]; Fidler@PIRNIE.COM;Elizabeth.A.Buckrucker@usace.army.mil;jfitzpatrick [jfitzpatrick@hydroqual.com]; lizabeth.A.Buckrucker@usace.army.mil;jfitzpatrick [jfitzpatrick@hydroqual.com]; fitzpatrick [jfitzpatrick@hydroqual.com]; arango.Eugenia@epamail.epa.gov@EPA[]
From: CN=Alice Yeh/OU=R2/O=USEPA/C=US
Sent: Tue 2/19/2008 1:48:18 PM
Subject: Fw: 1995-2001 bathymetric surveys
[Hydrographic Survey Accuracy Estimates - Passaic River NJ - 12 Feb 2008.pdf](#)
[OSI Bathymetry Report 08-15-95.pdf](#)

We discussed the need for this information a long time ago during one of our calls on the ST model or the EMBM sediment stability analyses.

----- Forwarded by Alice Yeh/R2/USEPA/US on 02/19/2008 08:44 AM -----

"Clifford Firstenberg" <cefirstenberg@cox.net>
02/18/2008 03:27 PM
To Alice Yeh/R2/USEPA/US@EPA
cc
Subject RE: 1995-2001 bathymetric surveys

Alice

After much searching and requesting that OSI summarize the issue of bathymetric uncertainty pertaining to their work in the Passaic River, please find attached (1) a PDF of the brief report that OSI prepared in 1995 and (2) a memo prepared by OSI discussing the issue of bathymetric uncertainty and the intercomparison work we did in 2001.

In the end, the short response is that the uncertainty for the 1995 survey is estimated at approximately +/- 0.22 ft.

Please let me know if you have any further questions.
Cliff

Clifford E. Firstenberg
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Thank You.

-----Original Message-----

From: Yeh.Alice@epamail.epa.gov [mailto:Yeh.Alice@epamail.epa.gov]

Sent: Wednesday, December 19, 2007 3:54 PM

To: cefirstenberg@cox.net

Subject: 1995-2001 bathymetric surveys

I am going to take you up on your offer to get more information from Ocean Surveys on the 1995-2001 bathymetric surveys they did for you.

When Malcolm Pirnie began working with the surveys, they asked Ocean Surveys about the precision of the data. Ocean Surveys estimated +/- 3 inches. Would you ask them to describe how they got the +/- 3 inches? Does that include instrument uncertainty or positioning uncertainty or anything else?

If you don't want to keep being intermediary for these questions, I don't mind if you refer me to someone in Ocean Surveys that I can talk to directly about this.